

Application no.: 08/786,988

Docket no.: SEQ-2001-UT2

**REMARKS**

Upon the cancellation of claims 1-107 and entry of new claims 108-146, claims 108-146 will be pending. Applicants extend their appreciation to the Examiner for discussing the new claims presented above with the undersigned representative.

Applicants reserve the right to pursue subject matter that will no longer be pending after cancellation, or which has not yet been pursued, in a related application. These new claims are directed to commercial embodiments, and they add no new matter as there is basis throughout the specification and in the claims as originally filed. For example, basis for the new claims is in the specification on pages 23-28 and in Figures 7, 8 and 9. Thus, entry of the new claims is proper.

**Enablement Rejection**

The Office rejected cancelled claims 43-44 for alleged lack of enablement. The Office reasoned that the claims were improper as they were directed to analyzing spots containing only matrix by mass spectrometry. The new claims do not require that matrix itself is analyzed by mass spectrometry, and therefore, the rejection is inapplicable to the newly claimed subject matter.

**Art Rejections**

Applicants respectfully assert that the rejections of the cancelled claims are inapplicable to new claims 108-146.

Cancelled claims 1-4, 6, 9-10, 14-15, 25-28 and 30 were rejected under 35 U.S.C. § 102(b) as allegedly anticipated by Zhang *et al.* (*JMS* letter), which hereafter is referred to as "Zhang I." Claims 109-146 depend from independent claim 108, the latter of which specifies the solution deposited on the substrate comprises matrix and **no analyte** and the resulting spots consist **essentially of matrix**. Zhang I does not anticipate the new claims because a solution of **matrix and analyte** are deposited, which cannot result in spots consisting essentially of matrix.

Cancelled claims 11-13, 29, 31-34, 40-42, 47, 51, 54-59, 61, 63-72, 82-85 and 87-94 were rejected under 35 U.S.C. § 103(a) as allegedly obvious over Zhang I in view of Nelson (U.S. patent No. 5,955,729). The combination of Zhang I and Nelson does not result in the subject matter of the

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new claims because there is no teaching or suggestion in the combination of applying a solution of matrix and no analyte to produce spots on a substrate consisting essentially of matrix.

Cancelled claims 5, 45-46, 48-50 and 78 were rejected under 35 U.S.C. § 103(a) as allegedly obvious over Zhang I and Nelson in view of Zhang et al. (*J. Mass Spectrom.*), which hereafter is referred to as "Zhang II." The combination of Zhang I and Nelson with Zhang II does not result in the claimed subject matter. Zhang II, as discussed in a previous response, reports methods for **continuously** depositing analyte on a **continuous** layer of matrix, **not** methods of generating an array of discrete spots consisting essentially of matrix as claimed. Thus, the cited combination **does not** render the newly claimed subject matter obvious.

Cancelled claims 16-24 and 102-103 were rejected under 35 U.S.C. § 103(a) as allegedly obvious over Zhang I and Hancock (U.S. Patent No. 5,716,825). Like other combinations of documents cited, the combination of Zhang I and Hancock does not result in the subject matter of the new claims because there is no teaching or suggestion of applying a solution of matrix and no analyte to produce spots on a substrate consisting essentially of matrix. For similar reasons, claims 60, 86 and 104-107 also are not obvious over the combination of Zhang I and Nelson in view of Hancock.

Thus, the subject matter of new claims 108-146 is novel and **not** *prima facie* obvious over the documents or combinations of documents cited in the previous Office action.

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**CONCLUSIONS**

Applicants respectfully submit that the new claims are in condition for allowance, and they earnestly solicit an early notice to such effect. That said, should any issues or questions remain, the Examiner is encouraged to telephone the undersigned at (858) 623-9470 so that they may be promptly resolved.

In the unlikely event the transmittal letter is separated from this document and the Office determines that an extension and/or other relief is required, Applicants petition for any required relief, including extensions of time, and authorize the Assistant Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to the credit card disclosed in form PTO-2038 filed with this document.

Respectfully submitted,

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